

Federal Energy Management Program

Distributed Energy Resources Bulletin: Sources of Financial Assistance and Information

Spring 2004

Financial assistance to federal agencies is available from several sources to help reduce the cost of installing distributed energy resources (DER) at their facilities. FEMP has undertaken this effort to identify sources of funding that may be available to federal agencies like yours for the implementation of DER projects. This document has been designed to briefly summarize the potential funding source and provide you, the user, with a quick link to the Web address where more detailed information about DER can be found.

In summary, three types of funding sources may be available for federal DER projects: Department of Energy (DOE) support, state programs, and utility programs. Although federal support for energy technologies is aimed primarily at research and development, some financial support is becoming available for DER deployment. When states have funding programs, they are typically at a higher dollar level than the more limited federal programs. Some state public service commissions mandate that investor-owned utilities sponsor incentives for DER, energy efficiency, and renewable energy. Other utilities voluntarily offer these incentives to their customers as a contribution to demand control.

Financial Assistance

Several sources of funding may be available for federal DER projects. This section outlines a few of the probable options. The following provides an overview of **all** federal financial assistance opportunities at the DOE. This document is not targeted specifically to DER: http://fedgrants.gov/Applicants/

The Office of Science is the largest source of financial assistance funding in DOE. Their home page, at http://www.er.doe.gov/production/grants/grants.html contains program descriptions, a *Grant Application Guide*, forms, staff contacts and listings of available solicitations.

Current DOE solicitations are maintained by the DOE at http://www.eere.energy.gov/de/financial/financial sol.shtml

System Benefit Funds (SBF)

As some states restructured their electric utility industries, 22 states have created pockets of dollars funded by electric customers. These programs help support certain energy policy goals, such as renewable energy development, energy efficiency incentives, energy research and development, and support for low-income customers. The charge to ratepayers varies by state (ranging from .5% to 4%), averaging about 3% of the customer's electric bill. States have the option of creating these funding sources without restructuring their electric power industry (Wisconsin is an example). Depending upon the specific design in each state, these dollars are administered either by utilities, non-profit organizations, or state agencies. Information on each state funding program is available at FEMP's <u>Utility Management Web site</u>. It has state-by-state information on opportunities to participate in energy efficiency and load management programs offered by utilities and other agencies. According to the American Council for Energy Efficient Economy http://www.aceee.org, the amount

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of state funds available in the United States totals \$1.697 billion. The emphasis on SBF allocation appears to be shifting somewhat towards peak reduction. ACEEE has produced an excellent state-by-state summary of SBF. See: http://www.aceee.org/briefs/mktabl.htm

Two states in particular, California and New York, have large SBF programs.

- For California information, see the following sites:
 California Energy Commission maintains a DER site: http://www.energy.ca.gov/distgen/equipment/equipment.html, including information on
 Distributed Generation Grants in California
- For New York information, see the New York State Energy Research and Development Authority: http://www.nyserda.org/
- A complete list of NYSERDA's Program Opportunity Notices (PONs) is available on the Web site at http://www.nyserda.org/rddopps.html.

The **Massachusetts Technology Collaborative** has recently launched its SBF program. See: http://www.mtpc.org/ Grant dollars are available. The Renewable Energy Trust seeks to fund projects and studies in the areas of green buildings, green power, solar energy, consumer energy awareness, and fuel cells in order to initiate a sustained shift toward the increased use of renewable energy.

Since state laws, rules, and programs are subject to change, energy managers are encouraged to regularly check the current status of state SBF policy and financial opportunities flowing from the SBF to support DG projects. A fast way to accomplish this is to visit the following DOE Web site: http://www.eere.energy.gov/state_energy/states.cfm.

Agencies can finance CHP and DER projects through energy savings performance contracts (ESPCs), utility energy service contracts (UESCs), or other financing vehicles. To learn more about these alternative financing vehicles and how FEMP can assist, see http://www.eere.energy.gov/femp/financing/mechanisms.cfm

<u>Financing Distributed Energy Resources</u> is an 11-page report produced by Dr. Andy Walker of the National Renewable Energy Laboratory's FEMP Program. The paper discusses several mechanisms for financing DG projects.

Other Distributed Energy and Funding Information

In addition to the information here, it is also recommended that federal energy managers view the *Database for State Incentives for Renewable Energy*, located at http://www.dcs.ncsu.edu/solar/dsire/finframe.html. This Web site, which lists recent updates to state renewable support programs, is managed by the Interstate Renewable Energy Council, funded by the U.S. Department of Energy's Office of Power Technologies and managed by the North Carolina Solar Center.

Combined Heat and Power Projects

Through its **ADD CHP** initiative (Accelerated Development and Deployment of CHP), FEMP is fielding requests for help from agencies interested in CHP. The following ADD CHP services and offerings may be of assistance.

Is CHP right for your facility? FEMP has a <u>free CHP screening</u> service for federal sites. An on-line form requires only minimal input from facility managers. This initial screening helps determine if more detailed analysis for your facility is worth the effort. To learn more, go to http://www.eere.energy.gov/femp/technologies/derchp.cfm.

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A FEMP **market assessment** indicates that CHP could be successfully applied in 9% of large federal facilities, in projects that would have an average simple payback of 7 years. "CHP Potential at Federal Sites," September 2002, encapsulates the information in FEMP's *Analysis of CHP Potential at Federal Sites*. Both documents are available in pdf under the CHP area at http://www.ornl.gov/femp/index.html.

Wind Projects

The American Wind Energy Association (AWEA) produced an *Inventory of State Incentives for Wind Energy in the U.S.* The inventory provides a state-by-state survey, with information about the local wind resource and about financial, economic, and regulatory incentives for wind energy in each state.

See: http://www.awea.org/policy/index.html#State Policies.

A state-by-state list of wind energy application incentives is available at http://www.awea.org/pubs/inventory.html.

FEMP Publications

Implementing a successful DG project involves several steps. FEMP's "Using Distributed Energy Resources: A How-To Guide for Federal Facility Managers" addresses the process for getting a DG system up and running at your site.

The FEMP DER and CHP Web site provides a link to other valuable information resources: http://www.eere.energy.gov/femp/technologies/derchp.cfm.

Massachusetts DG Guidebook

The Renewable Energy & DG Guidebook provides an overview of many DG issues, such as siting, that must be addressed in DG applications.

Links for More Information

The following Web sites have additional information on DER:

Federal Web sites

FEMP DER and CHP Program

http://www.eere.energy.gov/femp/technologies/derchp.cfm

Department of Energy – Regional Offices http://www.eere.energy.gov/rso.html

Department of Energy – Business Opportunities http://e-center.doe.gov/

FEMP Design Assistance Program

http://www.eere.energy.gov/femp/services/projectassistance.cfm

FEMP Renewable Energy

http://www.eere.energy.gov/femp/technologies/renewable energy.cfm

Energy Information Administration

http://www.eia.doe.gov

U.S. Environmental Protection Agency http://www.epa.gov

Industry and other Web sites

Alliance to Save Energy http://www.ase.org/

American Solar Energy Association http://www.ases.org/

American Wind Energy Association http://www.awea.org

Association Council for Energy Efficient Economy http://www.aceee.org

Distributed Power Coalition of America http://www.distributed-generation.com/dpca/

Edison Electric Institute http://www.eei.org

Electricity Storage Association http://www.electricitystorage.org/

Energy Star Product Information http://www.energystar.gov

Institute of Electrical and Electronics Engineers http://www.ieee.org

Interstate REC Interconnection Newsletter http://www.irecusa.org/connect/enewsletter.html

National Association of Regulatory Utility Commissioners http://www.naruc.org

Online Fuel Cell Information Center http://www.fuelcells.org

Public Technology, Inc. http://www.pti.org/

Solar Buzz http://www.solarbuzz.com

Solar Energy Industries Association http://www.seia.org

United States Fuel Cell Council http://www.usfcc.com

United States Combined Heat and Power Association http://uschpa.admgt.com/

This quarterly bulletin provides information on financial assistance in the federal sector related to DER.

Contact information:

Morey Wolfson 303-

morey wolfson@nrel.gov

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

EERE Information Center

The Office of Energy Efficiency and Renewable Energy has launched its new Information Center to provide a single point of contact for EERE's extensive portfolio of information products, tools, and partnership opportunities.

All EERE print materials (including online only products) should include a reference to the Information Center and provide contact information in a visible location within the document.

The reference should read as follows:

For more information contact: EERE Information Center 1-877-EERE-INF (1-877-337-3463) eereic@ee.doe.gov

or visit: www.eere.energy.gov